

Appl. No. 10/658,049  
Response dated April 14, 2005  
Reply to Office Action of March 15, 2005

### REMARKS/ARGUMENTS

#### Amendment to the Claims

The newly amended claims, Claims 2 – 43, are directed to preferred embodiments of the present invention claimed in Claim 44 of Group III. Amended Claims 2 – 43 are readable upon the elected Claims of Group III. No new matter is added to the present invention by amending Claims 2 – 43. The amended claims find support in original Claims 2 – 43.

The newly added claims, Claims 47 - 104, are also directed to preferred embodiments of the present invention claimed in Claim 44 of Group III. New Claims 47 - 104 are dependent upon the elected Claims of Group III. No new matter is added to the present application by the addition of Claims 47 - 104. Support for the new Claims is found in the Specification as a whole. Specifically, new Claim 47 finds support in the Specification on Page 23, lines 14 - 20. New Claims 48 – 104 find support in the Specification as a whole.

#### Restriction Requirement

Original Claims 1 – 46 of the present application are subject to a restriction requirement under 35 U.S.C. §121 to one of the following inventions:

**Group I.** Claims 1-5, drawn to a process for making an epoxy resin comprising (a) converting phenol(s) to aryl allyl ether of phenol(s), (b) converting an aryl allyl ether of phenol(s) to  $\alpha$ -dihydroxy derivative(s) of phenol(s), and (c) converting an  $\alpha$ -dihydroxy derivative of phenol(s) to an aryl glycidyl ether of phenol(s), classified in class 528, subclass 92.

**Group II.** Claims 6 – 43, drawn to a process for making an  $\alpha$ -halohydrin intermediate of phenol(s) comprising (a) converting an aryl allyl ether of phenol(s) to an  $\alpha$ -dihydroxy derivative of phenol(s) and (b) converting the  $\alpha$ -dihydroxy derivative of phenol(s) to an  $\alpha$ -halohydrin intermediate of phenol(s), classified in class 528, subclass 92.

**Group III.** Claims 44 and 46, drawn to a process for making an epoxy resin comprising (a) preparing an aryl allyl ether of phenol(s), (b) converting an aryl

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allyl ether of phenol(s) to an  $\alpha$ -dihydroxy derivative of phenol(s), (c) reacting the  $\alpha$ -dihydroxy derivative of phenol(s) with (i) a hydrogen halide and (ii) a carboxylic acid or ester to form a phenolic based  $\alpha$ -halohydrin intermediate, and (d) converting the phenolic-based  $\alpha$ -halohydrin intermediate to an epoxy resin product, classified in class 528, subclass 94.

Group IV.      Claim 45, drawn to an epoxy resin product, classified in class 528, subclass 94.

The Applicants hereby elect to prosecute Group III, Claims 44 and 46; and the claims dependant on Claim 44. Claims dependent on Claim 44 now include Claims 2 – 5, 7 – 15, 17 – 43, and 47 – 104.

In order to comply with 35 U.S.C. §121, the Applicants also hereby elect to prosecute the following species with regard to the claims of Group III:

- (a)      The phenols of claim 5 such as the 4,4'-bisphenol A (claim 5, page 92, line 27) depicted on page 78 of the specification (Reaction Scheme (V)).
- (b)      The aryl allyl ethers of phenols such as bisphenol A diallyl ether shown in Reaction Scheme (V).
- (c)      The  $\alpha$ -dihydroxy derivatives of phenols such as the bisphenol A  $\alpha$ -dihydroxy derivative exhibited in Reaction scheme (V).
- (d)      The aryl glycidyl ether epoxy resins such as the bisphenol A epoxy resin illustrated in Reaction Scheme (V).
- (e)      The  $\alpha$ -halohydrin intermediates of phenols such as the bisphenol A  $\alpha$ -chlorohydrin intermediate of Reaction Scheme (V).
- (f)      The hydrogen halides such as the HCl used in Example 1D, on Page 82, line 15.
- (g)      The carboxylic acids or esters such as 1-methoxy-2-propanol acetate employed in Example 1D, on Page 82, line 13.

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Traversal of Restriction Requirement

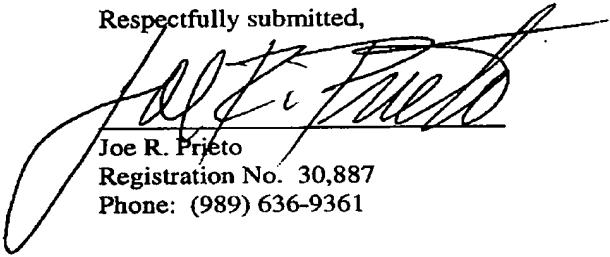
The Patent Office is respectfully requested to reconsider the above restriction requirement and to regroup the claims of Group I and III for the following reasons.

All of the groups fall under the general classification in Class 528. Groups I and III should be prosecuted together because Groups I and III are both directed to a process for making an epoxy resin. The epoxy resin processes, according to the claims in Group I and III are directly related to each other and would be easily searched together as one invention. Steps (b) and (c) of Claim 44 of Group III is a preferred embodiment of carrying out Step (b) of Claim 1 of Group I. Accordingly, it would be economical to search and prosecute the claims of Groups I and III together in one application. It is therefore respectfully requested that Groups I and III be prosecuted in one application.

The Applicants agree that Groups II and IV should remain separate from the other claims as these claims are directed to a process for making an  $\alpha$ -halohydrin intermediate of a phenol; and to a product by process, respectively.

Reconsideration of the above restriction requirement and a favorable action on the merits of the claims is respectfully requested.

Respectfully submitted,



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